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Sequence Listing was accepted.

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Reviewer: Anne Corrigan

Timestamp: [year=2008; month=11; day=23; hr=14; min=48; sec=36; ms=537;
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Application No: 10524939 Version No: 2.0

Input Set:**Output Set:**

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Finished: 2008-11-22 06:07:28.291
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 260 ms
Total Warnings: 20
Total Errors: 0
No. of SeqIDs Defined: 25
Actual SeqID Count: 25

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SEQUENCE LISTING

<110> BARRETT, ALAN
BEASLEY, DAVID
HOLBROOK, MICHAEL

<120> Compositions And Methods Related To Flavivirus Envelope
Protein Domain III Antigens

<130> UTSG:260US

<140> 10524939

<141> 2008-11-22

<150> 60/445,581

<151> 2003-02-06

<150> 60/403,893

<151> 2002-08-16

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<170> PatentIn Ver. 2.1

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Asp Gly Lys Gly Pro Ile Arg Phe Val Leu Ala Leu Leu Ala Phe Phe
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| Glu Leu Gly Thr Leu Thr Ser Ala Ile Asn Arg Arg Ser Thr Lys Gln | |
| 90 95 100 | |
| aag aaa aga gga ggc aca gcg ggc ttt act atc ttg ctt ggg ctg atc | 450 |
| Lys Lys Arg Gly Gly Thr Ala Gly Phe Thr Ile Leu Leu Gly Leu Ile | |
| 105 110 115 | |
| gcc tgt gct gga gct gtg acc ctc tcg aac ttc cag gcc aaa gtg atg | 498 |
| Ala Cys Ala Gly Ala Val Thr Leu Ser Asn Phe Gln Gly Lys Val Met | |
| 120 125 130 | |
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| Met Thr Val Asn Ala Thr Asp Val Thr Asp Val Ile Thr Ile Pro Thr | |
| 135 140 145 150 | |
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| Ala Ala Gly Lys Asn Leu Cys Ile Val Arg Ala Met Asp Val Gly Tyr | |
| 155 160 165 | |
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| Leu Cys Glu Asp Thr Ile Thr Tyr Glu Cys Pro Val Leu Ala Ala Gly | |
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| Asn Asp Pro Glu Asp Ile Asp Cys Trp Cys Thr Lys Ser Ser Val Tyr | |
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| Val Arg Tyr Gly Arg Cys Thr Lys Thr Arg His Ser Arg Arg Ser Arg | |
| 200 205 210 | |
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| Arg Ser Leu Thr Val Gln Thr His Gly Glu Ser Thr Leu Ala Asn Lys | |
| 215 220 225 230 | |
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| Lys Gly Ala Trp Leu Asp Ser Thr Lys Ala Thr Arg Tyr Leu Val Lys | |
| 235 240 245 | |
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| Val Ile Gly Trp Met Leu Gly Ser Asn Thr Met Gln Arg Val Val Phe | |
| 265 270 275 | |
| gcc att cta ttg ctc ctg gtg gca cca gca tac agc ttc aac tgt tta | 978 |
| Ala Ile Leu Leu Leu Leu Val Ala Pro Ala Tyr Ser Phe Asn Cys Leu | |
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| ggt gat ctg gta ctg gaa ggc gat agt tgt gtg acc ata atg tca aaa | 1074 |
| Val Asp Leu Val Leu Glu Gly Asp Ser Cys Val Thr Ile Met Ser Lys | |
| 315 320 325 | |
| gac aag cca acc att gat gtc aaa atg atg aac atg gaa gca gcc aac | 1122 |
| Asp Lys Pro Thr Ile Asp Val Lys Met Met Asn Met Glu Ala Ala Asn | |
| 330 335 340 | |
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| Leu Ala Asp Val Arg Ser Tyr Cys Tyr Leu Ala Ser Val Ser Asp Leu | |
| 345 350 355 | |
| tca aca aga gct gcg tgt cca acc atg ggt gaa gcc cac aac gag aaa | 1218 |
| Ser Thr Arg Ala Ala Cys Pro Thr Met Gly Glu Ala His Asn Glu Lys | |
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| tgg gga aat ggc tgc gga ctg ttt gga aag ggg agc att gac aca tgt | 1314 |
| Trp Gly Asn Gly Cys Gly Leu Phe Gly Lys Gly Ser Ile Asp Thr Cys | |
| 395 400 405 | |
| gcg aag ttt gcc tgt aca acc aaa gca act gga tgg atc atc cag aag | 1362 |
| Ala Lys Phe Ala Cys Thr Thr Lys Ala Thr Gly Trp Ile Ile Gln Lys | |
| 410 415 420 | |
| gaa aac atc aag tat gag gtt gcc ata ttt gtg cat ggc ccg acg acc | 1410 |
| Glu Asn Ile Lys Tyr Glu Val Ala Ile Phe Val His Gly Pro Thr Thr | |
| 425 430 435 | |
| ggt gaa tct cat ggc aag ata ggg gcc acc cag gct gga aga ttc agt | 1458 |
| Val Glu Ser His Gly Lys Ile Gly Ala Thr Gln Ala Gly Arg Phe Ser | |
| 440 445 450 | |
| ata act cca tcg gcg cca tct tac acg cta aag ttg ggt gag tat ggt | 1506 |
| Ile Thr Pro Ser Ala Pro Ser Tyr Thr Leu Lys Leu Gly Glu Tyr Gly | |
| 455 460 465 470 | |
| gag gtt acg gtt gat tgt gag cca cgg tca gga ata gac acc agc gcc | 1554 |
| Glu Val Thr Val Asp Cys Glu Pro Arg Ser Gly Ile Asp Thr Ser Ala | |
| 475 480 485 | |
| tat tac gtt atg tca gtt ggt gag aag tcc ttc ctg gtt cac cga gaa | 1602 |
| Tyr Tyr Val Met Ser Val Gly Glu Lys Ser Phe Leu Val His Arg Glu | |
| 490 495 500 | |
| tgg ttt atg gat ctg aac ctg cca tgg agc agt gct gga agc acc acg | 1650 |
| Trp Phe Met Asp Leu Asn Leu Pro Trp Ser Ser Ala Gly Ser Thr Thr | |
| 505 510 515 | |
| tgg agg aac cgg gaa aca ctg atg gag ttt gaa gaa cct cat gcc acc | 1698 |
| Trp Arg Asn Arg Glu Thr Leu Met Glu Phe Glu Glu Pro His Ala Thr | |

| 520 | 525 | 530 | |
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| aaa caa tct gtt gtg gct cta ggg tcg cag gaa ggt gcg ttg cac caa | | | 1746 |
| Lys Gln Ser Val Val Ala Leu Gly Ser Gln Glu Gly Ala Leu His Gln | | | |
| 535 | 540 | 545 | 550 |
| gct ctg gcc gga gcg att cct gtt gag ttc tca agc aac act gtg aag | | | 1794 |
| Ala Leu Ala Gly Ala Ile Pro Val Glu Phe Ser Ser Asn Thr Val Lys | | | |
| | 555 | 560 | 565 |
| ttg aca tca gga cat ctg aag tgt cgg gtg aag atg gag aag ttg cag | | | 1842 |
| Leu Thr Ser Gly His Leu Lys Cys Arg Val Lys Met Glu Lys Leu Gln | | | |
| | 570 | 575 | 580 |
| ctg aag gga aca aca tat gga gta tgt tca aaa gcg ttc aaa ttc gct | | | 1890 |
| Leu Lys Gly Thr Thr Tyr Gly Val Cys Ser Lys Ala Phe Lys Phe Ala | | | |
| | 585 | 590 | 595 |
| agg act ccc gct gac act ggc cac gga acg gtg gtg ttg gaa ctg caa | | | 1938 |
| Arg Thr Pro Ala Asp Thr Gly His Gly Thr Val Val Leu Glu Leu Gln | | | |
| | 600 | 605 | 610 |
| tat acc gga aca gac ggt ccc tgc aaa gtg ccc att tct tcc gta gct | | | 1986 |
| Tyr Thr Gly Thr Asp Gly Pro Cys Lys Val Pro Ile Ser Ser Val Ala | | | |
| 615 | 620 | 625 | 630 |
| tcc ctg aat gac ctc aca cct gtt gga aga ctg gtg acc gtg aat cca | | | 2034 |
| Ser Leu Asn Asp Leu Thr Pro Val Gly Arg Leu Val Thr Val Asn Pro | | | |
| | 635 | 640 | 645 |
| ttt gtg tct gtg gcc aca gcc aac tcg aag gtt ttg att gaa ctc gaa | | | 2082 |
| Phe Val Ser Val Ala Thr Ala Asn Ser Lys Val Leu Ile Glu Leu Glu | | | |
| | 650 | 655 | 660 |
| ccc ccg ttt ggt gac tct tac atc gtg gtg gga aga gga gaa cag cag | | | 2130 |
| Pro Pro Phe Gly Asp Ser Tyr Ile Val Val Gly Arg Gly Glu Gln Gln | | | |
| | 665 | 670 | 675 |
| ata aac cat cac tgg cac aaa tct ggg agc agc att gga aag gcc ttt | | | 2178 |
| Ile Asn His His Trp His Lys Ser Gly Ser Ser Ile Gly Lys Ala Phe | | | |
| | 680 | 685 | 690 |
| acc acc aca ctc aga gga gct caa cga ctc gca gct ctt gga gat act | | | 2226 |
| Thr Thr Thr Leu Arg Gly Ala Gln Arg Leu Ala Ala Leu Gly Asp Thr | | | |
| 695 | 700 | 705 | 710 |
| gct tgg gat ttt gga tca gtt gga ggg gtt ttc acc tca gtg ggg aaa | | | 2274 |
| Ala Trp Asp Phe Gly Ser Val Gly Gly Val Phe Thr Ser Val Gly Lys | | | |
| | 715 | 720 | 725 |
| gcc ata cac caa gtc ttt gga gga gct ttt aga tca ctc ttt gga ggg | | | 2322 |
| Ala Ile His Gln Val Phe Gly Gly Ala Phe Arg Ser Leu Phe Gly Gly | | | |
| | 730 | 735 | 740 |
| atg tcc tgg atc aca cag gga ctt ctg gga gct ctt ctg ttg tgg atg | | | 2370 |
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| | 745 | 750 | 755 |

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| Gly Ile Asn Ala Arg Asp Arg Ser Ile Ala Met Thr Phe Leu Ala Val | |
| 760 765 770 | |
| gga gga gtt ttg ctc ttc ctt tgc gtc aac gtc cat gct gac aca ggc | 2466 |
| Gly Gly Val Leu Leu Phe Leu Ser Val Asn Val His Ala Asp Thr Gly | |
| 775 780 785 790 | |
| tgt gcc att gat att ggc agg caa gag ctc cgg tgc gga agt gga gtg | 2514 |
| Cys Ala Ile Asp Ile Gly Arg Gln Glu Leu Arg Cys Gly Ser Gly Val | |
| 795 800 805 | |
| ttt atc cac aac gat gtg gaa gcc tgg atg gat cgt tac aag ttc tac | 2562 |
| Phe Ile His Asn Asp Val Glu Ala Trp Met Asp Arg Tyr Lys Phe Tyr | |
| 810 815 820 | |
| ccg gag acg cca cag ggc cta gca aaa att atc cag aaa gca cat gca | 2610 |
| Pro Glu Thr Pro Gln Gly Leu Ala Lys Ile Ile Gln Lys Ala His Ala | |
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| gaa gga gtc tgc ggc ttg cgt tcc gtt tcc aga ctc gag cac caa atg | 2658 |
| Glu Gly Val Cys Gly Leu Arg Ser Val Ser Arg Leu Glu His Gln Met | |
| 840 845 850 | |
| tgg gaa gcc att aag gat gag ctg aac acc ctg ttg aaa gag aat gga | 2706 |
| Trp Glu Ala Ile Lys Asp Glu Leu Asn Thr Leu Leu Lys Glu Asn Gly | |
| 855 860 865 870 | |
| gtc gac ttg agt gtc gtg gtg gaa aaa cag aat ggg atg tac aaa gca | 2754 |
| Val Asp Leu Ser Val Val Val Glu Lys Gln Asn Gly Met Tyr Lys Ala | |
| 875 880 885 | |
| gca cca aaa cgt ttg gct gcc acc acc gaa aaa ctg gag atg ggt tgg | 2802 |
| Ala Pro Lys Arg Leu Ala Ala Thr Thr Glu Lys Leu Glu Met Gly Trp | |
| 890 895 900 | |
| aag gct tgg ggc aag agt atc atc ttt gcg cca gaa cta gct aac aac | 2850 |
| Lys Ala Trp Gly Lys Ser Ile Ile Phe Ala Pro Glu Leu Ala Asn Asn | |
| 905 910 915 | |
| acc ttt gtc atc gac ggt cct gag act gag gaa tgc cca acg gcc aac | 2898 |
| Thr Phe Val Ile Asp Gly Pro Glu Thr Glu Glu Cys Pro Thr Ala Asn | |
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| cga gca tgg aac agt atg gag gta gag gac ttt gga ttt gga ctg aca | 2946 |
| Arg Ala Trp Asn Ser Met Glu Val Glu Asp Phe Gly Phe Gly Leu Thr | |
| 935 940 945 950 | |
| agc act cgc atg ttc ctg agg att cgg gaa acg aac aca acg gaa tgc | 2994 |
| Ser Thr Arg Met Phe Leu Arg Ile Arg Glu Thr Asn Thr Thr Glu Cys | |
| 955 960 965 | |
| gac tgc aag atc ata gga acc gcc gtc aag aac aac atg gct gtg cat | 3042 |
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| 985 990 995 | |
| ctt gag agg gcg gtt cta gga gaa gtc aaa tca tgc acc tgg cca gaa | 3138 |
| Leu Glu Arg Ala Val Leu Gly Glu Val Lys Ser Cys Thr Trp Pro Glu | |
| 1000 1005 1010 | |
| acc cac act ctg tgg ggt gat gga gtt ctg gaa agt gat ctc atc ata | 3186 |
| Thr His Thr Leu Trp Gly Asp Gly Val Leu Glu Ser Asp Leu Ile Ile | |
| 1015 1020 1025 1030 | |
| ccc atc acc ttg gca gga ccc aga agc aac cac aac agg aga cca ggg | 3234 |
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| 1035 1040 1045 | |
| tac aaa act cag aac caa ggc cca tgg gat gag ggg cgc gtc gag att | 3282 |
| Tyr Lys Thr Gln Asn Gln Gly Pro Trp Asp Glu Gly Arg Val Glu Ile | |
| 1050 1055 1060 | |
| gac ttt gac tat tgc cca gga aca aca gta act ata agt gac agt tgc | 3330 |
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| 1065 1070 1075 | |
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| atc aca gac tgg tgc tgc aga agt tgc acc ctc cct cca ctg cgc ttc | 3426 |
| Ile Thr Asp Trp Cys Cys Arg Ser Cys Thr Leu Pro Pro Leu Arg Phe | |
| 1095 1100 1105 1110 | |
| cag act gag aat ggc tgt tgg tat gga atg gaa att cga cct acg cgg | 3474 |
| Gln Thr Glu Asn Gly Cys Trp Tyr Gly Met Glu Ile Arg Pro Thr Arg | |
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| Pro Gly Leu Lys Cys Leu Asn Leu Asp Val Tyr Arg Ile Leu Leu Leu | |
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